SubU

1. (Amended) An integrated circuit (10) provided with a substrate (11) and with a memory having a first heat-programmable memory element (30), which memory element (30) comprises:

an electrically conducting organic material having a non-programmed and a programmed state, wherein the organic material is programmed by heating the memory element to a transition temperature that reduces conduction through predetermined portions thereof;

a first electrode (26) and a second electrode (28),

wherein the first (26) and the second electrode (28) are interconnected in the non-programmed state by an electrically conducting bridge (27) which comprises the organic material,

said bridge (27) is at least partly interrupted in the programmed state so that conduction therein is reduced from when said bridge was in the non-programmed state

- 3. (Amended) An integrated circuit (10) as claimed in claim 1, further comprising an electrical conductor track (23) being arranged therein for limiting heat dissipation from the bridge, perpendicular projections of said conductor track (23) and of the bridge (27) on the substrate (11) overlapping each other.
- 8. (Amended) An integrated circuit (10) as claimed in claim 7, characterized in that the bridge (27) is adapted to function as a conductor track that limits heat dissipation by having a smaller width (13) than the first transistor electrode (21) of the first transistor (20) and than the first electrode (26) of the first memory element (30).